

Covid19 Era Online Learning for Kids, Boon or Curse? An Analysis of Different Studies

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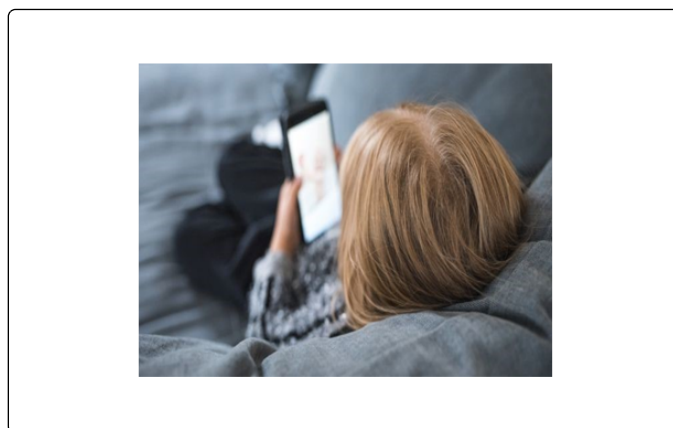
Abstract

As the world is crippling down to COVID-19 pandemic in this time, many schools, colleges and universities have introduced the concept of online reading or online studies.

The concept of online learning is not new in our surroundings; many top-class universities have already started it few years back. This is the era of digital life, where these uses of gadgets have become inevitable and we can't imagine life without these devices. No doubt it has made the world smaller and the concept of the globalization and entire world as a small family has come true.

But at the same time, using this device continuously for the long period of time has some adverse health effects. Mostly children and young adults are more vulnerable to these, but it can affect people of any age.

Keywords: Covid 19; Eyes; Outdoor; Distanc.



One another study concluded that “The increased use of digital devices by adolescents brings anew challenge of digital eyestrain at an early age. Our study reports the patterns of electronicdevice usage by school children, evaluates factors associated with eyestrain and highlights the need for further investigation of these issues” [3,4].

One more study suggested that computer use, especially at a very young age, is moderately associated with myopia development in childhood. Reading time had a stronger association with myopia, possibly because of a shorter near work distance. The effect of combined near work activities could be lowered by outdoor exposure. It is likely that the increased use of digital devices may have an impact on myopia development in the coming years [5-7].



What does clinical studies say?

There are multiple studies which have shown the health effects of using digital devices like Laptop or PC, Mobile and Tablets.

One study said that 90% people using digital device have encountered problem such as eye strain. It also suggested that the following factors are associated with digital eye strain: uncorrected refractive error (including presbyopia), accommodative anomalies, altered blinking pattern (reduced rate and incomplete blinking), excessive exposure to intense light, closer working distance, and smaller font size [1].

Another study done in china concluded that “Asthenopia appears to be common among college students in China. Preventative measures against asthenopia include limiting the amount of time spent using digital devices in bed (<0.5 h), adopting a posture of lying on one's back while doing so and engaging in aerobic exercise for more than one hour per day” [2].



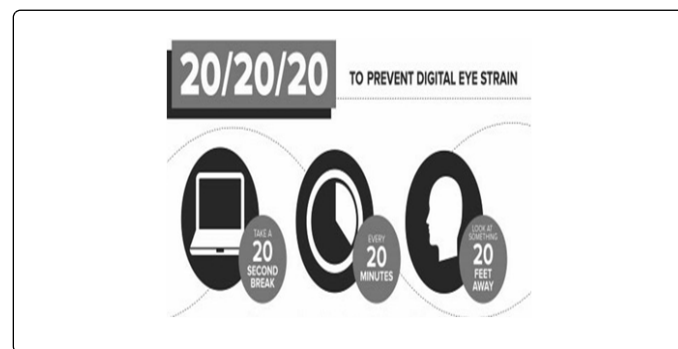
Discussion

The prevalence of myopia around the world has increased recently. Several factors have been suggested to play a role in the development of myopia. Other than genetic factors, environment is also an important contributing factor in the development of myopia. Studies on populations with very similar genetic backgrounds that grew up in different environments have shown that those growing up in rural environments have a lower prevalence of myopia. Environmental influences related to prolonged reading or near work as well as fewer hours spent outdoors are associated with a higher prevalence of myopia [6].

tear or sting. This eye strain is no different from the symptoms you may have when reading, writing or doing “close work” like sewing for long stretches of time [5].

Children and other who use digital gadgets more are advised to take appropriate rest to reduce the effects of Eye strain and other related symptoms like Dry eye, Headache, Eye pain, Neck pain etc.

The best method to reduce the aftereffects of uses of this device is “20/20/20 rule”. Which says that if you take a break of 20 seconds every 20 minutes and look away beyond 20 feet will help greatly to reduce the symptoms.



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Remember:

- 20/20/20 rule
- Take rest while working near
- Just 20 seconds rest is enough
- Prevent Myopia Progression

American Academy of Ophthalmology (AAO) suggest that “Digital-related eye strain affects people of all ages. If you spend hours a day using digital devices, you might notice your vision blurs, and your eyes feel achy and tired. You may also find your eyes become dry and will